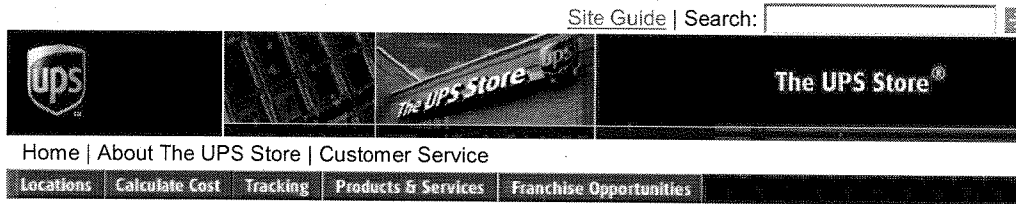


EXHIBIT 7  
DECLARATION OF WILLIAM BIRDWELL  
IN SUPPORT OF  
PLAINTIFF'S RESPONSE TO DEFENDANT'S  
MOTION TO QUASH SERVICE



## Locations

→ The UPS Store

## Locations

[View Location Detail](#)

### Location:

29488 WOODWARD AVE  
ROYAL OAK, MI 48072

**Phone:** (248) 548-8178

**Fax:** (248) 548-8176

→ [E-mail The UPS Store #4708](#)

**Additional Information:** SOUTH OF WEBSTER BETWEEN 12 MILE RD & 13 MILE RD

### Regular Hours of Operation:

Monday 9:00am-7:00pm  
Tuesday 9:00am-7:00pm  
Wednesday 9:00am-7:00pm  
Thursday 9:00am-7:00pm  
Friday 9:00am-7:00pm  
Saturday 10:00am-6:00pm

## Products & Services

### Mailing and Shipping Services

Mail Box Services  
(24-Hour Access\*)  
Stamps & Metered Mail  
Certified Mail/Return Receipt  
Overnight Document & Package Delivery  
Ground/Air UPS  
Shipping and Receiving  
TotalShipping™  
(Freight Shipping)  
UPS  
International Shipping

### Packing and Moving Services

Packing and Moving Boxes

### Copy and Print Services

Full Service Black & White Copies  
Self Service Black & White Copies  
Color Copies  
Printing Services: Business Cards, Envelopes and Letterheads  
Binding  
Laminating  
Collating  
Full Range of Finishing Services

### Communication and Business Services

Fax Services, Send and Receive

### Additional Products and Services

Office Products and Supplies  
Rubber Stamps

\* 24-hour access available at most locations

EXHIBIT 7  
PAGE 1 OF 5



## Locations

→ The UPS Store

## Locations

View Location Detail

**Location:**

512 S WASHINGTON  
ROYAL OAK, MI 48067-3826

**Phone:** (248) 399-8860**Fax:** (248) 399-1026

→ E-mail The UPS Store #3399

**Additional Information:** WASHINGTON BETWEEN 5TH AND 6TH**Regular Hours of Operation:**

Monday 9:00am-7:00pm  
Tuesday 9:00am-7:00pm  
Wednesday 9:00am-7:00pm  
Thursday 9:00am-7:00pm  
Friday 9:00am-7:00pm  
Saturday 9:00am-5:00pm

**Products & Services****Mailing and Shipping Services**

Mail Box Services  
(24-Hour Access\*)  
Mail Forwarding  
Stamps & Metered Mail  
Certified Mail/Return Receipt  
Global Mail Box Services  
Overnight Document & Package Delivery  
Ground/Air UPS Shipping and Receiving  
TotalShipping™ (Freight Shipping)  
UPS  
USPS  
Pick-up Service  
Delivery Service  
International Shipping

**Packing and Moving Services**

Packing and Moving Boxes  
Estate Packing  
Custom Crating

**Copy and Print Services**

Full Service Black & White Copies  
Self Service Black & White Copies  
Oversized Black & White Copies  
Black & White Copies-Output Direct from Computer  
Color Copies  
Color Copies-Output Direct from Computer  
Printing Services: Business Cards, Envelopes and Letterheads  
Digital Laser Printing  
Binding  
Laminating  
Collating  
Full Range of Finishing Services  
Specialty Paper Selection  
Commercial Accounts  
Available  
Pick Up & Delivery  
Available

**Communication and Business Services**



Fax Services, Send and Receive  
Black & White Scanning

**Additional Products and Services**

Notary Services  
Office Products and Supplies  
Rubber Stamps  
Notary Services by Appointment

EXHIBIT 7  
PAGE 2 OF 5

[Site Guide](#) | Search:

**The UPS Store®**

[Home](#) | [About The UPS Store](#) | [Customer Service](#)

[Locations](#)
[Calculate Cost](#)
[Tracking](#)
[Products & Services](#)
[Franchise Opportunities](#)

**Locations**  
[→ The UPS Store](#)

## Locations

View Location Detail

**Location:**  
562 LAKELAND PLAZA  
CUMMING, GA 30040-2783

**Phone:** (770) 889-7447  
**Fax:** (770) 889-8560  
[→ E-mail The UPS Store #1709](#)

**Additional Information:** LOWER LAKELAND PLZ ACROSS FROM GOODWILL FACING HWY 9

**Regular Hours of Operation:**  
Monday 8:00am-6:30pm  
Tuesday 8:00am-6:30pm  
Wednesday 8:00am-6:30pm  
Thursday 8:00am-6:30pm  
Friday 8:00am-6:00pm  
Saturday 9:00am-3:00pm

---

**Products & Services**

<p><b>Mailing and Shipping Services</b>  Mail Box Services (24-Hour Access*)  Mail Forwarding  Stamps &amp; Metered Mail  Certified Mail/Return Receipt  Overnight Document &amp; Package Delivery  Ground/Air UPS Shipping and Receiving  TotalShipping™ (Freight Shipping)  UPS  USPS  Pick-up Service  Delivery Service  International Shipping</p> <p><b>Packing and Moving Services</b>  Packing and Moving Boxes  Custom Crating  Gift Boxes</p>	<p><b>Copy and Print Services</b>  Full Service Black &amp; White Copies  Self Service Black &amp; White Copies  24-Hour Access to Black &amp; White Copiers  Black &amp; White Copies-Output Direct from Computer  Color Copies  Color Copies-Output Direct from Computer  Printing Services: Business Cards, Envelopes and Letterheads  Digital Laser Printing  Binding  Laminating  Collating  Full Range of Finishing Services  Specialty Paper Selection  Presentation Materials and Supplies  Commercial Accounts Available  Pick Up &amp; Delivery Available</p> <p><b>Communication and Business Services</b>  Fax Services, Send and Receive  Computer Rental  Internet Access  Black &amp; White Scanning  Color Scanning  Computer Rental with Internet Access</p>	<p><b>Additional Products and Services</b>  Notary Services  Passport Photos  Shredding Services  Office Products and Supplies  Rubber Stamps  Greeting Cards  Notary Services by Appointment  Digital or Polaroid Camera  House Accounts</p>
--	---	---

\* 24-hour access available at most locations

The UPS Store: Locations

[Home](#) | [Locations](#) | [Calculate Cost](#) | [Tracking](#) | [Products & Services](#) | [Franchise Opportunities](#) | [About The UPS Store](#)  
[Customer Service](#) | [UPS.com](#)

MBE is a UPS® company. The UPS Store® locations are independently owned and operated by franchisees of Mail Boxes Etc., Inc. in the USA and by its international master licensees and their franchisees outside of the USA. Services and hours of operation may vary by location.

Copyright © 1994-2007 United Parcel Service of America, Inc. All rights reserved.

[Privacy Policy](#) | [Terms & Conditions of Service](#)

EXHIBIT 7  
PAGE 4 OF 5

UNITED STATE DISTRICT COURT  
Western District of Washington

Joescan, Inc.,  
Plaintiff,  
v.

Case#: **07 CV 24**

LMI Technologies, Inc.  
Defendant.

**Affidavit of Bad-Address**

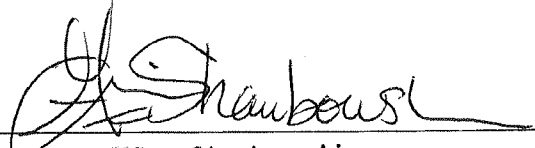
Being duly sworn on my oath, I *GINA SHARBOWSKI*, declare that:

- 1) I am a citizen of the United States, over the age of eighteen and not a party to this action.

I received an original and copies of the SUMMONS & COMPLAINT issued out of the U.S. District Court, Western District of Washington, on the above named matter on 7-11-07 and immediately proceeded to attempt to make service of process.

- 3) That on 7-12-07 I attempted to serve the defendant; **LMI TECHNOLOGIES, INC.** at the business address of: *29488 Woodward Ave., Ste.#331, Royal Oak, MI 48073* but have found this to be a 'UPS Store' where I did confirm that the defendant company rents a P.O. Box at the UPS Store, Box#331. The UPS employees are typically not allowed to give out any information with out a subpoena, however he did confirm that the Defendant LMI TECHNOLOGIES, INC. is still the current boxholder of #331 and that the address they provided on their application is the same address in Canada that is listed on the summons.

JUL 21 2007

  
**Gina Sharbowski**  
Process Server

Subscribed and Sworn to before me on JUL 21 2007

*Tina H. Murphy*

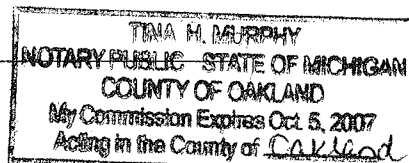
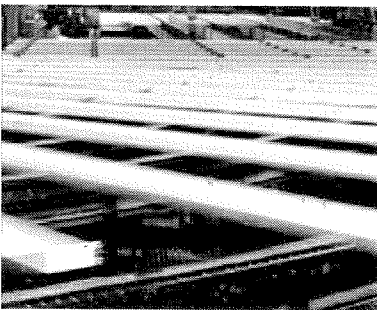


EXHIBIT 7  
PAGE 5 OF 5

EXHIBIT 8  
DECLARATION OF WILLIAM BIRDWELL  
IN SUPPORT OF  
PLAINTIFF'S RESPONSE TO DEFENDANT'S  
MOTION TO QUASH SERVICE





## DynaVision® SENSORS THAT SEE™

DynaVision is the flagship brand of LMI Technologies. In the wood industry, the most trusted name for world class scanner technology since 1976.

DynaVision proudly partners with leading world-wide OEM's and Systems Integrators in the wood processing industry. Through these alliances we collectively engineer disciplined advancements in lumber optimization solutions; producing mills' best level returns in value and volume recovery.

Learn about our products  **DynaVision**  SENSORS THAT SEE.



Visit our Corporate website  **LMI**  SENSORS THAT SEE.

EXHIBIT 8  
PAGE 1 OF 3





## Main Page

## Features

**Spotlight**  
**Sawmill Upgrade**  
**Harvesting1**  
**Logging**  
**Profile**  
**Quebec Sawmilling**  
**Forest Expo Guide**  
**Mill Upgrade**  
**Harvesting2**  
**Log Salvage**  
**Added-Value**  
**Oregon Wrapup**  
**Guest Column**

---

## Departments

Supplier Newsline  
**TechUpdate**  
**Calendar of Events**

---

## Site Information

**Search**  
**Contact List**  
**Subscription Info**  
**Past Issues Archive**

## Supplier Newsline

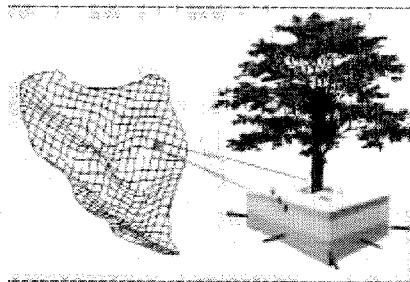
### Sample Sealer Prevents Moisture Loss

The BOSS (bright orange sample sealer) is a moisture barrier coating from U•C Coatings Corp designed to prevent moisture loss from the ends of kiln sample boards. Easy to apply, it dries to a hard, nonmessy coating and contains no dangerous solvents or volatile organic compounds. No cost samples are available for testing to ensure its compatibility with particular operating methods. BOSS can be left to dry or put directly into the kiln. Hot, soapy water clean up is recommended.

\*\*\*\*\*

### Watershed Analysis Model Expands

A newly enhanced computer model may help forest managers to design or modify forest roads, tree harvesting and other land use activities based on their effects on watersheds, streams and fish habitat. Researched at the US Department of Energy's Pacific Northwest National Laboratory, the model simulates the movement of water throughout a watershed using thousands of computational grid cells, making it possible to explore economic and environmental tradeoffs. In each cell, the model considers solar radiation, precipitation, air temperature, evaporation, plant transpiration and down slope water movement. The Geographic Information System based Modeling System for Watershed Analysis (GISWA) shows how alternative practices can help avoid altering a watershed's natural processes by simulating hydrologic conditions at thousands of locations, including flow below the ground's surface, which may be redistributed when trees are harvested or roads are built



\*\*\*\*\*

### EZLINK Monitoring Reduces Downtime

Dodge EZLINK offers a solution for the online monitoring of bearings, gear reducers, motors and other mechanical components, helping to avoid sudden failures by checking temperature, vibration and speed. By including mechanical components in



EXHIBIT 8  
PAGE 2 OF 3

the selected task. An additional "heavy lift" mode provides eight per cent more force on the boom for unusual requirements. Two boom settings facilitate gathering and scraping operations in smooth mode and efficient excavating with maximum digging force in power mode.



\*\*\*\*\*

### **DynaVision Joins LMI Group**

Dynamic Control Systems Inc (also known as DynaVision) announces its recent merger with three other leading noncontact laser based measurement and control companies, Selcom, Sami and Sensors95. The new international group operates under the name of LMI (Laser Measurement International) and has its head office in Vancouver, BC. LMI chairman and CEO Len Metcalfe says the synergy the four companies bring to the Group will create a strong, future oriented worldwide organization. Manufacturing and R and D facilities are located in North America and Europe, while sales offices in Canada, the US and Europe support a distribution network throughout 30 countries. DynaVision is now LMI, Wood Products Division, serving the forest product industries and generally focusing on laser scanners for sawmilling, veneer plants and building material production. DynaVision will continue to be used as a product name.


\*\*\*\*\*

### **Tigercat Acquires CTL Technology**

Tigercat Industries Inc announces it has acquired the assets of Swedish forestry equipment manufacturer Hemek. The new Swedish company will be known as Tigercat AB. Established in 1962, Hemek manufactures a line of cut to length equipment including 14 and 18ton forwarders as well as three eight wheel harvester models. It also manufactures the Woodking line of single grip harvesting attachments. Like Tigercat, Hemek has a strong engineering focus. With its production facility located in Hede, Sweden, it is currently operating in Scandinavia, Europe and Australia, as well as North and South America. Tigercat designs and manufactures a growing line of forestry equipment that will be enhanced with the acquisition of the Hemek/Woodking line.

EXHIBIT 8  
PAGE 3 OF 3

EXHIBIT 9  
DECLARATION OF WILLIAM BIRDWELL  
IN SUPPORT OF  
PLAINTIFF'S RESPONSE TO DEFENDANT'S  
MOTION TO QUASH SERVICE



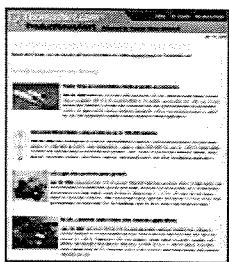
Search for: 
Search what?

[Home](#) | [ThomasNet](#) | [My Newsroom](#) | [Industrial Trends](#) | [Forums](#) | [Submit Release](#) | [Advertise](#) | [Contact](#) | [About](#)

200

## Newsletters

### Subscribe Free to Product News Alerts



Receive customized, daily news on the products you want.

[Subscribe](#) [View Sample](#)

## Categories

[Industrial Market Trends](#)

[OnSite WebReviews](#)

[Latest New Product News](#)

[Adhesives and Sealants](#)

[Agricultural and Farming Products](#)

[Architectural and Civil Engineering Products](#)

[Automatic ID](#)

[Chemical Processing and Waste Management](#)

[Cleaning Products and Equipment](#)

[Communication Systems and Equipment](#)

[Computer Hardware and Peripherals](#)

Advertisement

WHEN YOU NEED HIGH PRECISION AND LOW RIPPLE IN THE

**LAB PARTNER**

WITH THE PROFESSIONAL EXPERTS

**www.spellmanhv.com/bertan/tn**

Story Tools

[Go Back](#) | [E-mail](#) | [Print](#)

Tools for Registered Users

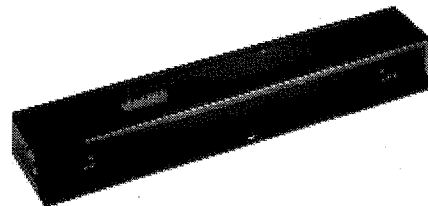
[Save Story](#) | [Watch Company](#)

## Archive News Story

(Products mentioned in this Archive News Story may or may not be available from the manufacturer.)

### Multi-Point Sensor scalps aluminum ingots.

**March 26, 2002** - B8 Sensor has 8 individual laser points spaced every 3.0 in. over 2 ft length. Depth of measurement range of each laser point is up to 14 in., with accuracy of +/- 0.020 in. and resolution of less than 0.010 in. Binocular vision system verifies information collected. With 2 DSP computer chips, B8 can be linked or multiplexed with other units. 16-bit controller and RS-485 or RS-232 interface provides connections with PCs, PLCs and other automated systems.



[Click Here to Enlarge Picture](#)

**Related categories:** [Chemical Processing & Waste Management](#) | [Sensors, Monitors & Transducers](#) | [Test & Measuring Instruments](#)

## Archive Press Release

(Products mentioned in this Archive Press Release may or may not be available from the manufacturer.)

Release date: February 21, 2002

**LMI Selcom  
Multi-Point Sensor**

- ➔ [Contact company](#)
- ➔ [Company Profile at ThomasNet.com](#)
- ➔ [Company web site](#)
- ➔ [More news from this company](#)
- ➔ Search the industrial web for: "LASER, MEASUREMENT, SENSOR, SENSORS, INGOT, INGOTS, SCALPING"
- ➔ Search for suppliers of:
  - [Instruments: Distance Measuring Scalpers](#)
  - [Sensors: Laser](#)
  - [Sensors: Measurement & Inspection](#)

EXHIBIT 9  
PAGE 1 OF 5



[Construction Equipment and Supplies](#)

[Controls and Controllers](#)

[Display and Presentation Equipment](#)

[Electrical Equipment and Systems](#)

[Electronic Components and Devices](#)

[Explosives, Armaments and Weaponry](#)

[Fasteners and Hardware](#)

[Fluid and Gas Flow Equipment](#)

[Food Processing and Preparation](#)

[Health, Medical and Dental Supplies and Equipment](#)

[HVAC](#)

[Labels, Tags, Signage and Equipment](#)

[Laboratory and Research Supplies and Equipment](#)

[Lubricants](#)

[Machinery and Machining Tools](#)

[Material Handling and Storage](#)

[Materials and Material Processing](#)

[Mechanical Components and Assemblies](#)

[Mechanical Power Transmission](#)

[Mining, Oil Drilling & Refining](#)

[Mounting and Attaching Products](#)

**With Visible Lasers And Higher Speed For Scalping Aluminum Ingots Or Other Large Area Measurements Introduced**

Contact: David Allen  
(248) 359-2401  
For Immediate Release  
February 21, 2002

DETROIT, Michigan USA  
--- A high resolution multi-point sensor for large area measurement such as the scalping of aluminum ingots was introduced by LMI Selcom at the recent TMS Show in Seattle, Washington, USA. LMI Selcom has offices in Detroit, Michigan USA and Gothenburg, Sweden.

"The LMI Selcom B8 scan head is faster than any multi-head sensor we have ever made," noted David Allen, LMI Selcom Business Manager. "It is ideal for scalping plus various other applications in the ferrous and non-ferrous market."

The B8 multi-point sensor has eight individual laser points spaced every 3.0 in. (7.62 cm) over a 2.0 ft (61 cm) length. The sensor's fast response rate and tight control provides the high density information required by the scalping machine to make an accurate measurement of the lowest point on the ingot for optimum quality control and reduced waste.

The depth of the measurement range of each laser point is up to 14 in. (36cm), with an accuracy +/- 0.020 in. (0.05 cm) and a resolution of less than 0.010 in. (0.025 cm) of the measurement range. The housing is rated NEMA-4 (IP-65) and is protected by a gasket aluminum enclosure for easy operation at temperatures from 32°F to 120°F (0° to 50°C).

A revolutionary binocular vision system verifies all the information collected. Sensors adjust for target angle, color and other defects. The system has the ability to be multi-plexed with multiple sensor heads to provide an effective scan width of virtually any size desired.

The B8 sensor uses 650 nm red laser diodes for easy alignment and installation with one cable. The sensor interfaces to any PC-based data acquisition system and is versatile to meet constantly changing computer technology. LMI also offers set-up and calibrate software for easy integration on single or multiple head systems.

Besides scalping, the B8 sensor is also ideal for height and profile measurement of various metals, sizing of materials and various other large scale measurements that require profiling large pieces of material.

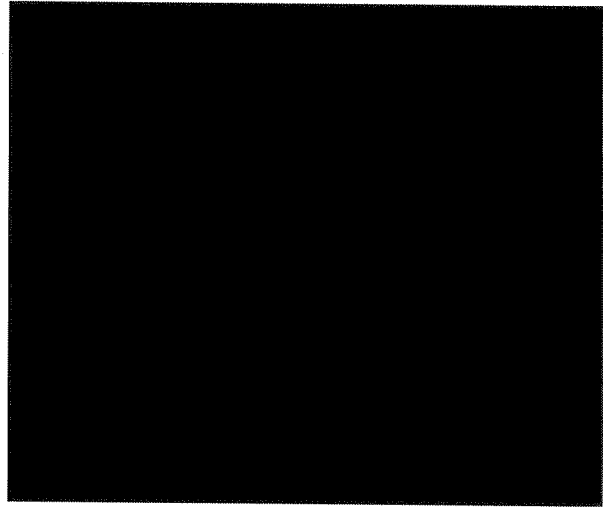
**B8 Multi-Point Sensor Described**

With two high power DSP computer chips, the B8 Multi-Point Sensor from LMI Selcom can be linked or multi-plexed with other units, providing the same accuracy and resolution of a single unit.

[Sensors: Precision Measurement](#)

➔ [Join the forum discussion at: Tools of the Trade](#)

Advertisement



T  
ma  
pri

I

C

S  
S  
R

S  
S  
R

Ba  
Ma  
cor  
for  
tec  
mo

EXHIBIT 9  
PAGE 2 OF 5

Non-Industrial ProductsOptics and PhotonicsPackaging EquipmentPaints and CoatingsPlant Furnishings andAccessoriesPortable ToolsPrinting and Duplicating  
EquipmentRetail and Sales  
EquipmentRoboticsSafety and Security  
EquipmentSensors, Monitors and  
TransducersServicesSoftwareTest and Measuring  
InstrumentsTextile Industry ProductsThermal and Heating  
EquipmentTimers and ClocksTransportation Industry  
ProductsVision SystemsWaste Handling  
EquipmentWelding Equipment and  
SuppliesAssociation NewsBrowse CategoriesBrowse CompaniesPress Releases

The B8 sensor's 16-bit controller and standard RS-485 or optional RS-232 interface provides simple and easy connections with PCs, PLCs and other automated systems. Input power is 15 to 26 VDC's @ 750 mA. Software comes on a 3.5 floppy disc.

A type GaAlAs Class IIIa laser, laser diodes are projected on the object measured. Reflection off the object's surface produces diffusely scattered light. The light passes through the sensor's imaging optics onto two position sensitive linear CCD line elements. The sensor is not affected by changes in ambient lighting or temperature.

Besides the B8 sensor, LMI Selcom also offers a variety of single-point and multi-point non-contact laser sensors to the aluminum industry for molds, launders, as well as other applications such as coil wind-up and take-off. A Tap-Out Actuator for improving safety and quality when casting out from a gravity furnace, a Pin Position Actuator for high performance molten metal level and flow control in downspouts and an overpour protection device for increasing safety and control during pouring are also available.

LMI Selcom is part of LMI Technologies, Inc., a world leader in 1D, 2D and 3D machine vision sensors.

For more information on the new B8 Multi-Point Sensor or other products LMI Selcom offers to the aluminum market, contact LMI Selcom in North America at LMI -Laser Measurement International Industrial Sensors Division at 21666 Melrose Avenue, Southfield, MI 48075 or call (248) 359-2409, FAX (248) 355-3283 or E-Mail [issales@lmint.com](mailto:issales@lmint.com).

Outside of North America, contract LMI Selcom at Box 250, Ogardesvagen 19A, SE-433 25 Partille, Sweden, Tel: +46 (0) 31-336-25 42. FAX +46-(0) 31-44-61-79 or E-Mail [sales.aluminum@lmint.com](mailto:sales.aluminum@lmint.com). LMI is on the internet at <http://www.lmint.com>.

Editor Contact: Kevin Nichols or Dick Stark, Stark & Associates, Inc. 801 E. Morehead St, Suite 305, Charlotte, NC 28202  
Tel: (704) 332-5004, FAX: (704) 332-3771 or E-Mail [kn@starkpr.com](mailto:kn@starkpr.com) or [ds@starkpr.com](mailto:ds@starkpr.com)

**Contacts:****Public Relations:**

Stark & Associates Inc.  
Kevin Nichols or Dick Stark  
801 E. Morehead St. Suite 305  
Charlotte NC 28202  
USA  
Phone: 704-332-5004  
FAX: 704-332-3771  
☒ E-mail this person

**General Information:**

David Allen  
USA  
Phone: 248-359-2401

**Company Information:**

**Name:** LMI - Laser Measurement International, Inc.  
**Address:** 21666 Melrose Ave.  
**City:** Southfield  
**State:** MI  
**ZIP:** 48075  
**Country:** USA  
**Phone:** 248-359-2409  
**FAX:** 248-355-3282  
<http://www.lmint.com>

MT  
De  
ele  
nor  
me  
disj

Re  
Inc  
Mai  
ele  
me  
col  
ele

Ric  
Mai  
tim  
opt  
3-D  
me

Ca  
Pro  
Mai  
pro  
witt  
app  
cer

Gr  
Co  
Spe  
ma  
& s  
Oth  
...

TR  
Mai  
cor  
pro  
rot  
tra  
mo

We  
Mai  
ma  
ser  
pro  
ima  
mo

Inc  
En  
Mfr  
fac

EXHIBIT 9  
PAGE 3 OF 5



**ThomasNet®**  
**Industrial NewsRoom®**

Search for:

Search what?

News

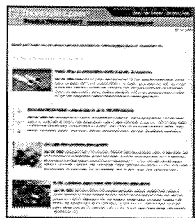
Go

[Home](#) | [ThomasNet](#) | [My Newsroom](#) | [Industrial Trends](#) | [Forums](#) | [Submit Release](#) | [Advertise](#) | [Contact](#) | [About](#)

Jul 24, 2007

## Newsletters

### Subscribe Free to Product News Alerts



Receive customized, daily news on the products you want.

[Subscribe](#) [View](#)

[Sample](#)

## Categories

[Industrial Market](#)

[Trends](#)

[OnSite WebReviews](#)

[Latest New Product](#)

[News](#)

[Adhesives and](#)

[Sealants](#)

[Agricultural and](#)

[Farming Products](#)

[Architectural and Civil](#)

[Engineering Products](#)

[Automatic ID](#)

[Chemical Processing](#)

[and Waste](#)

[Management](#)

[Cleaning Products and](#)

[Equipment](#)

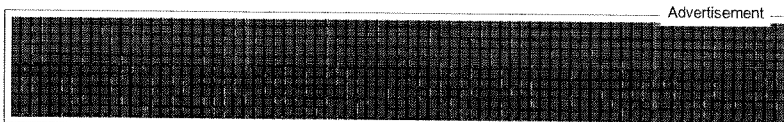
[Communication](#)

[Systems and](#)

[Equipment](#)

[Computer Hardware](#)

[and Peripherals](#)



Story Tools

[Go Back](#) |

[E-mail](#) |

[Print](#)

Tools for Registered

Users

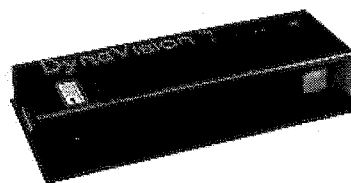
[Save Story](#) | [View Company](#)

## Archive News Story

(Products mentioned in this Archive News Story may or may not be available from the manufacturer.)

### Scanner produces up to 125 profiles/sec.

**January 21, 2002** - L1 3-D Line Scanner is capable of supplying 3-D profiles across optical line up to 24 in. long. At transport speed of 47.2 in./sec, a new profile is reported every other 0.4 in. L1 has 120° field of vision and 23.6 in. measurement area that can be used individually or in conjunction with 3 additional units to acquire 360° of data. It has 1/16 in. resolution and stand off distance of 19 to 26 in.



[Click Here to Enlarge Picture](#)

**Related categories:** [Computer Hardware & Peripherals](#)

## Archive Press Release

(Products mentioned in this Archive Press Release may or may not be available from the manufacturer.)

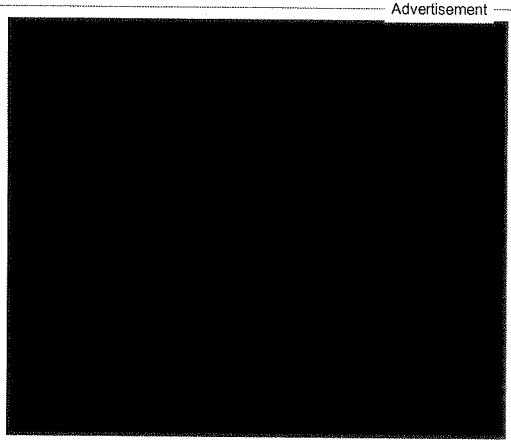
Release date: December 31, 2001

### Profiling Scanner Produces Up To 125 Profiles Per Second For 2D And 3D Image Measurement

Detroit, MI---LMI Selcom has introduced the L1 3-D Line Scanner for general purpose accurate profile scanning capabilities supplying a 3-Dimensional profile across an optical line up to 24" in length.

The LMI Selcom L1 3-D Line Scanner is designed for extremely high

- ➔ [Company Profile at ThomasNet.com](#)
- ➔ [Company web site](#)
- ➔ [More news from this company](#)
- ➔ [Search the industrial web for: "LINE, SCANNER, LASERS, MEASUREMENT, SENSORS"](#)
- ➔ [Search for suppliers of: Scanners: Laser](#)
- ➔ [Join the forum discussion at: Wired In](#)



## Newsroom Advertisers

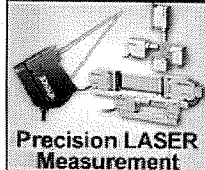


Materials handling  
product distribution,  
systems  
engineering,  
turnkey installation -  
US Materials  
Handling

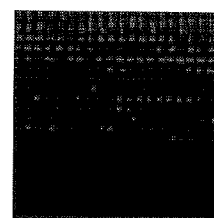


BARCODES WEST, LLC

Your Complete  
Label Printing  
Solution Source



Precision LASER  
Measurement



HANDHELD and  
PROCESS CONTROL  
WATER QUALITY  
INSTRUMENTATION

Accuracy  
Reliability  
Simplicity

[www.myronl.com](http://www.myronl.com)

EXHIBIT 9  
PAGE 4 OF 5



ConstructionEquipment andSuppliesControls andControllersDisplay andPresentationEquipmentElectrical Equipment  
and SystemsElectronicComponents andDevicesExplosives,Armaments andWeaponryFasteners andHardwareFluid and Gas FlowEquipmentFood Processing andPreparationHealth, Medical andDental Supplies andEquipmentHVACLabels, Tags, Signage  
and EquipmentLaboratory andResearch Suppliesand EquipmentLubricantsMachinery andMachining ToolsMaterial Handling andStorageMaterials and MaterialProcessingMechanicalComponents andAssembliesMechanical PowerTransmission

resolution profiling and easy start-up in the most demanding industrial environments. At a 47.2 in./sec (1.2 m/sec) transport speed, a new profile is reported every other 0.4 in. (1 cm) to deliver the highest quality high density renderings. The L1 has a 120° field of vision and a 23.6 in. (600mm) measurement area per unit that can be used individually or in conjunction with three additional units to acquire 360° of data.

The L1 sensor has been developed for industrial settings requiring high measurement accuracy regardless of ambient light. The sensors are manufactured with rugged industrial housings, and are pre-calibrated at the factory for maximum precision.

Up to four sensor heads a plugged into a concentrator box. The L1 Scanner uses an ISA Host Card with quadrature encoder input for on-line profiling (PCI host card is optional). LMI provides front end calibration software for easy integration and installation.

Common Applications include quality control on wallboard(gypsum), accurate wood/board/cant profiling, pipe diameter, length, gap measurement, container fill, surface topography, ingot scalping and extrusion profile/width.

The use of visible lasers allows this scanner to be used for accurate targeting and optimization on specific active targets. This product is also available with a scan rate of 125 scans per second.

Technical Specifications

The LMI Selcom L1 Line Scanner is a Class III rated sensor with fast 60 profiles per second (125 scans per second optional) which ensures accurate testing data. The scanner has a resolution of 1/16 inches (1.5875 mm) and a stand off distance of 19 inches to 26 inches (483 mm-660 mm). The sensor is built to NEMA-4 (IP 65) standards and enclosed in an aluminum housing. It can operate at temperatures from 32° to 105° F (0° to 40° C). Based on CCD technology, the scanner can provide a data profile that can be filtered or otherwise processed for accuracy.

Company Information:

**Name:** LMI - Laser Measurement International, Inc.

**Address:** 21666 Melrose Ave.

**City:** Southfield

**State:** MI

**ZIP:** 48075

**Country:** USA

**Phone:** 248-359-2409

**FAX:** 248-355-3282

<http://www.lmint.com>

More news from this company:

Nov 17, 2005 - Laser Sensor measures thickness and profile of glass.  
Jun 23, 2005 - Digital Laser Line Sensor utilizes triangulation principle.  
Jan 5, 2005 - Self-Contained Sensor has 16 kHz data sampling rate.  
Dec 3, 2004 - Laser Sensors offer long stand-off and measurement range.  
Aug 10, 2004 - Gauging Sensor Head suits limited work envelopes.  
Jul 29, 2004 - Laser Nano Sensor measures thickness and roughness.  
Jun 30, 2004 - Digital Laser Sensor suits pulp and paper industries.  
Jun 4, 2004 - Laser Triangulation Sensor suits positioning applications.  
Mar 17, 2004 - Measurement Sensor offers sensing lengths to 3.3 ft.  
Aug 6, 2003 - Laser Twin Sensor measures from 0.20 to 0.79 in.

Hitachi Computer Products (America), Inc.  
Oklahoma Manufacturing Division

ISO 9001:2000, ISO 13485:2003 & ISO 14001:2004 certified Contract Manufacturer of RoHS compliant PCB assemblies, box builds, electronic & electromechanical solutions for industries including computing, networking, communications, instrumentation and medical.

More related stories:

May 24, 2007 - Airborne Laser Scanner utilizes waveform digitizing.  
Apr 12, 2007 - Laser Scanner Kit is compact and portable.  
Mar 23, 2007 - Color Laser Scanner provides computerized measurement.  
Feb 13, 2007 - Laser Scanners suit automated warehousing and shopfloor.  
Dec 26, 2006 - Automated Extrusion Scanner monitors profiles in real-time.  
Nov 13, 2006 - Laser Scanner suits hazardous area applications.  
Nov 9, 2006 - Laser Barcode Scanner meets needs of small businesses.  
Jul 17, 2006 - Laser Scanners safeguard work areas and protect personnel.  
Jun 27, 2006 - 3D Laser Scanner provides full field-of-view.

**Heraeus**



**Metal Paper  
Plastic**

Stock, OEM and Custom  
Infrared Equipment for  
Heating Applications

**Chromalox**  
PRECISION HEAT AND CONTROL

[www.chromalox.com](http://www.chromalox.com)



**OLYMPUS**

Our Future

516.302.0152



Advertisement

General Scanning  
Optical Scanners

Manufacturer of optical scanners & optical scanner equipment, including wide-band width moving ...  
[more](#)

Zumbach  
Electronics Corp.

Industrial high precision on-line measuring solutions for diameter, wall thickness, capacitance, & ...  
[more](#)

SICK, Inc.

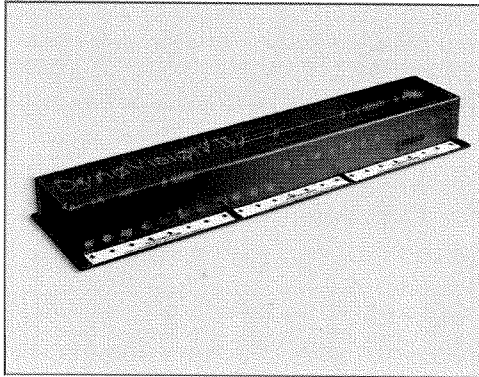
Specialists In Opto-Electronic Technology. A Complete Range Of Products For Use In

EXHIBIT 10  
DECLARATION OF WILLIAM BIRDWELL  
IN SUPPORT OF  
PLAINTIFF'S RESPONSE TO DEFENDANT'S  
MOTION TO QUASH SERVICE



## Product Information

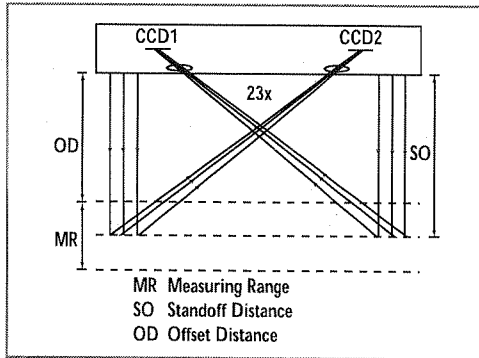
LASER MEASUREMENT INTERNATIONAL / finger gmbh & co KG  
Industrial Sensors Division



# M24 Multi-Point Sensor

## Multi-point Triangulation Principle

The M-24 optical scanner is a general-purpose profile scanner capable of supplying a 3-D profile with 23 lasers. Two groups of lasers (a group of 11 and a group of 12) emitted by laser diodes are projected onto the object to be measured via a system of lenses. Reflection off the object's surface produces diffusely scattered light. After passing through imaging optics, a portion of the light falls onto two position sensitive linear CCD line elements with a resolution of 2048 points. Displacing the object will lead to a change in angle (in relation to the sensor). As a result, the light spot will hit the CCD more to the left or more to the right. In turn, the change in position of the light spot will lead to a change in the output of each measuring point by the signal processing electronics, which includes a 16-bit micro-controller. The RS-485 (optional RS-232) interface provides a simple connection with a PC. Software is available on a 3.5 in. disk. The scan head has 23 measuring points with an interval spacing of 1 in. and is capable of measuring a width of 23 in. at a frequency of 1100 Hz per point. The M-24 contains two high-power DSP computer chips and can be linked with other M-24 units to provide an effective scan width of any size. An internal feedback loop automatically compensates for differences in detected light intensity due to the object's color and texture by varying power to the laser diode. The scan head contains a built-in display for diagnostics and easy installation.

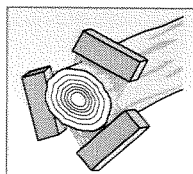
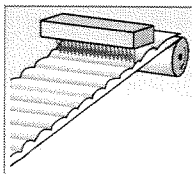


## Technical Specifications

Model Number		Measurement Range (MR)	Stand Off (SO)	Offset Distance (OD)	Resolution*	Linearity** at SO	Triangulation Angle at SO	Spot Size at SO
M-24 14-24	mm	610	660	355	0.254	0.660	15-45	2 x 1
	in	24	26	14	0.010	0.026	15-45	0.08 x 0.04

\* - Resolution is target dependent and reported without averaging at full bandwidth (worst case). Data averaging will improve resolution specifications (see chart in general brochure).

\*\* - Linearity is calculated as 0.1% of Actual Measurement Reading (AMR).



Information contained within this document is subject to change. For updated information please contact LMI.

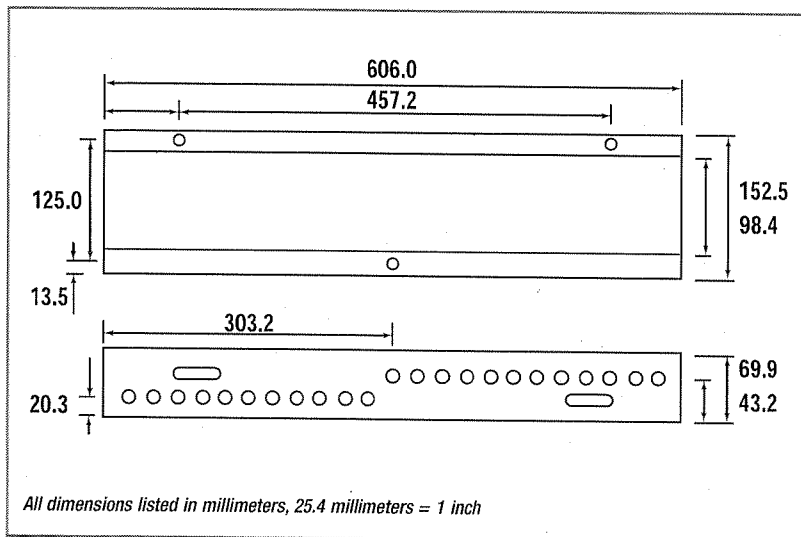
M240300

EXHIBIT 10  
PAGE 7 OF 8



**M24****Technical Specifications**

LASER SOURCE		Standard	ENVIRONMENTAL		
Laser type		GaAlAs	Enclosure		IP-65 / NEMA 4
Laser class		IIIb	Temperature	°C	0 - 50
Laser source power	mW	5		°F	32 - 122
Wavelength	nm	780	Temp. Fluctuation	% MR / °C	0.01
Lifetime expectancy	hr	100,000	Relative Humidity	%	<90 non-condensing
ELECTRICAL		Standard	PHYSICAL		
Power supply (linear)	VDC	+15 ±5%	Dimensions	mm	606 x 152 x 70
Current draw	A	3		in.	23.85 x 6.00 x 2.75
Digital Outputs		RS-232 / RS-485	Weight	g	5600
Frequency response	Hz	1,100 (per point)		lbs.	12.3
Detector type		Dual CCD	Cable length	m	2.5
				ft.	8.2

**CONNECTION WIRING**

A	Receive Data (Rx+)
B	Receive (Rx-)
C	Power (+15 VDC)
D	Ground
E	Transmit (Tx+)
F	Transmit (Tx-)

**1- YEAR LIMITED WARRANTY**

The company will replace or, at the company's option, repair any system or parts thereof which are found defective in material or workmanship within one year from the date of shipment. Our obligation with respect to such system or part thereof shall be limited to repair and replacement F.O.B. company's facilities, and in no event shall the company be liable for incidental, consequential or special damages, or for transportation, installation, adjustment or other expenses which may arise in connection with such system or parts. This warranty is expressly made in lieu of any and all other warranties, expressed or implied, including warranties of merchantability and fitness. No waiver, alteration, or modification of the foregoing warranty shall be valid unless made in writing and signed by an executive of the company.

LMI laser sensors are manufactured under one or more of the following U.S. patents: 4,305,661; 4,373,804; 4,375,921; 4,394,683; 4,576,482; 4,667,231; 4,875,776; 5,056,922; 5,114,230; 5,164,579; 5,362,970; 5,510,625; 5,670,787; 5,684,292; 5,691,545; 5,734,172; 5,811,827; 5,854,491; 5,877,491; 5,880,459; 5,940,302; 5,981,965. Other US and foreign patents pending.



**Laser Measurement International, Inc.**  
Industrial Sensors Division:

**North America:**  
**LMI Selcom Inc.**  
21666 Melrose Ave.  
Southfield, MI 48075  
USA  
phone: +1 (248) 359-2409  
fax: +1 (248) 355-3283  
e-mail: sales@lmint.com  
USA East: +1 (770) 888-6586  
USA West: +1 (310) 641-6779

**Europe:**  
**LMI Sensors-95**  
Valkenburgerweg 223  
6419 AT Heerlen  
The Netherlands  
phone: +31 45-5719300  
fax: +31 45-5742500  
e-mail: sensors95@lmint.com

**Germany:**  
**finger GmbH & CO KG**  
Sapelloh 84  
31606 Warmen  
phone: +49(0)5767 96020  
fax: +49(0)5767 93004  
e-mail: info@finger-kg.de

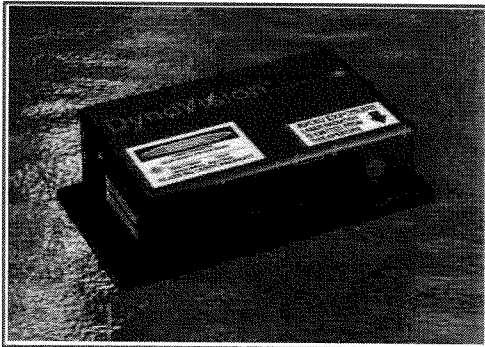
[www.lasersensors.lmint.com](http://www.lasersensors.lmint.com) or [www.finger-kg.de](http://www.finger-kg.de)

EXHIBIT 10  
PAGE 2 OF 8

## Product Information

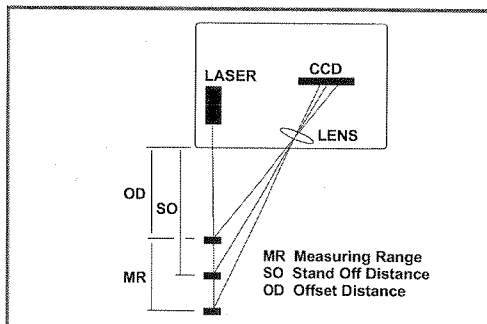


## DynaVision SPR 04



**Accurate, Affordable CCD**  
**Short Range Digital Sensor**

- Digital-Based Triangulation Sensor Family
- Smart, Self-Contained Sensors
- Compact Sensor Size
- User Scalable Range Via RS232
- Analog and Digital Outputs
- Rugged Industrial Packaging
- Excellent Ambient Light Rejection
- Ideal for Short Standoff Applications



## Technical Specification

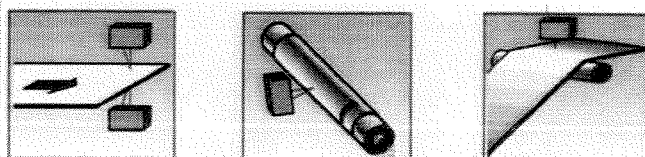
Model Number	Measurement Range (MR)	Stand Off (SO)	Offset Distance (OD)	Resolution (Worst Case) Note 1	Resolution (Typical) Note 2	Linearity	Triangulation Angle at SO	Spot Size at SO
SPR04 2-8	mm 203	152	51	0.025	0.0025	0.152	10 deg.	3 x 1
	in 8	6	2	0.001	0.0001	0.006		0.12 x 0.04

Note : SPR04 sensors are supplied with an RS232 communications link. With easy to use Windows-based software for a user supplied PC which can select a smaller measuring range (which improves sensor linearity), and allows rescaling of the voltage output range. Performance at smaller ranges is:

	Measurement Range (MR)	Stand Off (SO)	Offset Distance (OD)	Resolution (Worst Case) Note 1	Resolution (Typical) Note 2	Linearity	Triangulation Angle at SO	Spot Size at SO
mm	50	89	51	0.025	0.0025	0.089	17 deg.	3 x 1
in	2	3.5	2	0.001	0.0001	0.003		0.12 x 0.04
mm	102	102	51	0.025	0.0025	0.102	15 deg.	3 x 1
in	4	4	2	0.001	0.0001	0.004		0.12 x 0.04
mm	152	127	51	0.025	0.0025	0.127	12 deg.	3 x 1
in	6	5	2	0.001	0.0001	0.005		0.12 x 0.04

Note 1: Worst Case Resolution - at full bandwidth

Note 2: Typical Resolution - at 128 sample averaging



DynaVision

Information contained within this document is subject to change. For updated information, please contact LMI.

SPR 04 Sep 6, 2002

EXHIBIT 10  
 PAGE 3 OF 8

## Technical Specifications

**DynaVision SPR 04****LASER SOURCE**

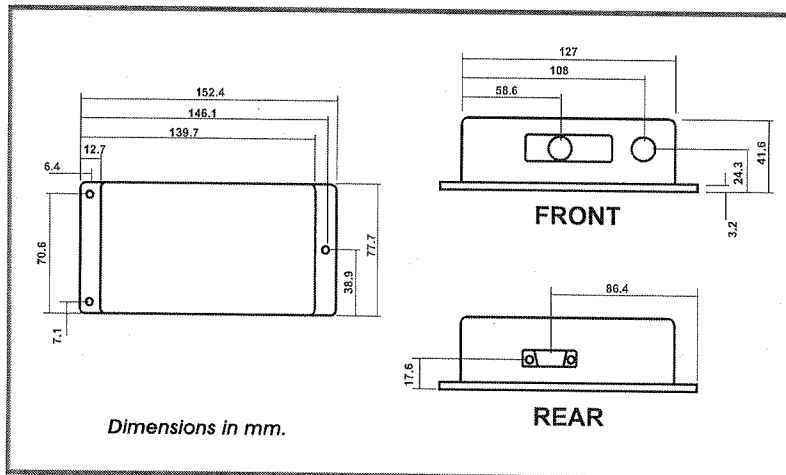
Laser type	GaAlAs	Enclosure	IP-65 / NEMA 4
Laser class	IIa	Temperature	°C 0 - 50
Laser source power	mW <5		°F 32 - 122
Wavelength	nm 670	Temp. Fluctuation	% of MR / °C 0.01%
Lifetime expectancy	hr 100 000	Relative Humidity	% <95 non-condensing

**ENVIRONMENTAL****ELECTRICAL**

Power supply voltage	VDC +15 to +30	Dimensions	mm 152.4 x 77.7 x 41.6
Current draw	mA < 300 @ 15VDC		in 6 x 3.06 x 1.64
Data Rate	Hz 1 800	Weight	kg 0.58
			lbs 1.3
Detector type	CCD	Cable Length	m 2.5
			ft 8.2

**PHYSICAL****OUTPUT INTERFACES**

Interface, analog / digital	0-10 VDC, 4-20 ma	RS-485/422/232
Data update rate	1 800 Hz	

**CONNECTION WIRING D-SUB 15**

1	Power (+15 to +30 VDC)
2	Receive (Rx-)
3	Transmit (Tx-)
4	Analog out (0V to 10V)
5	Out of range
8	Analog out (GND)
9	Receive (Rx+)
10	Transmit (Tx+)
11	Power (GND)
12	Analog out (4-20 ma)
6, 7, 13, 14, 15	Reserved

**1- YEAR LIMITED WARRANTY**

The company will replace or, at the company's option, repair any system or parts of a system which are found defective in material or workmanship within one year from the date of shipment. Our obligation with respect to such system or parts shall be limited to repair and replacement, F.O.B. our facilities, and in no event shall the company be liable for incidental, consequential or special damages, or for transportation, installation, adjustment or other expenses which may arise in connection with such system or parts. This warranty is expressly made in lieu of any and all other warranties, expressed or implied, including warranties of merchantability and fitness. No waiver, alteration, or modification of the foregoing warranty shall be valid unless made in writing and signed by an executive of the company.

LMI vision sensors are manufactured under one or more of the following U.S. patents: 4,305,661; 4,373,804; 4,375,921; 4,394,683; 4,576,482; 4,667,231; 4,875,776; 5,056,922; 5,114,230; 5,164,579; 5,362,970; 5,510,625; 5,670,787; 5,684,292; 5,691,545; 5,734,172; 5,811,827; 5,854,491; 5,877,491; 5,880,459; 5,940,302; 5,981,965. Other US and foreign patents pending.

[www.lmint.com](http://www.lmint.com)

**Head Office:**

LMI Technologies Inc.  
205-7088 Venture St.  
Delta, British Columbia  
Canada, V4G 1H5  
Phone: +1 (604) 940-0141  
Fax: +1 (604) 940-0793  
E-mail: [sales@lmint.com](mailto:sales@lmint.com)

**North America:**

LMI Selcom Inc.  
21666 Melrose Ave.  
Southfield, MI 48075  
USA  
Phone: +1 (248) 359-2409  
Fax: +1 (248) 355-3283  
E-mail: [sales@lmint.com](mailto:sales@lmint.com)  
USA East: +1 (770) 888-6586

**Europe & rest of the world:**

LMI Selcom AB  
Box 250  
S-433 25 Partille  
Sweden  
Phone: +46 31 336 25 00  
Fax: +46 31 44 61 79  
E-mail: [sales.lmiselcom.ab@lmint.com](mailto:sales.lmiselcom.ab@lmint.com)

**Europe:**

LMI Sensors-95  
Valkenburgerweg 223  
6419 AT Heerlen  
The Netherlands  
Phone: +31 45 850 7000  
Fax: +31 45 574 2500  
E-mail: [sensors95@lmint.com](mailto:sensors95@lmint.com)

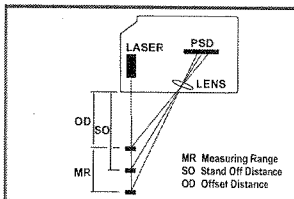
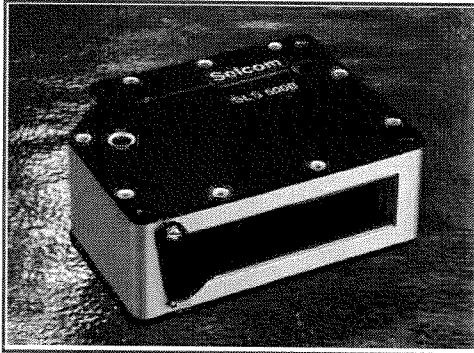




## Product Information



## Selcom - SLS 5000



## High Frequency and Accuracy

## Advanced Image Filtering for Hostile Environments

- High Speed PSD-Based Triangulation Sensor Family
- Extremely Fast Automatic Light Control for Varying Surfaces
- Resolutions to 0.15 Microns
- Analog and Digital Outputs
- Rugged Industrial Packaging
- Internal Processor for Application Software - e.g. Seam Finding, Radial Runout, Wane Detection, Level Control
- Ideal for General Purpose Applications

## Options &amp; Accessories

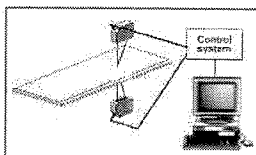
- Onboard Processor for Application Software
- Heat Protection Unit
- +24 VDC Power Supply Unit
- Air Purge Adapter

## Technical Specification

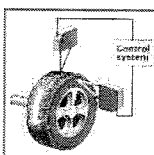
Model Number	Measurement Range (MR)	Stand Off (SO)	Offset Distance (OD)	Resolution (Worst Case)	Resolution (Typical)	Linearity	Triangulation Angle at SO	Spot Size at SO
				Note 1	Note 2			
SLS 5006/50	mm 6	50	47	0.0015	0.00015	0.003	36 deg.	0.07
	in 0.24	1.97	1.85	0.00006	0.000006	0.00012		0.003
SLS 5020/50	mm 20	50	40	0.005	0.0005	0.010	36 deg.	0.07
	in 0.79	1.97	1.57	0.0002	0.00002	0.00039		0.003
SLS 5010/100	mm 10	100	95	0.0025	0.00025	0.005	27 deg.	0.12
	in 0.39	3.94	3.74	0.0001	0.00001	0.0002		0.005
SLS 5020/100	mm 20	100	90	0.005	0.0005	0.010	27 deg.	0.12
	in 0.79	3.94	3.54	0.0002	0.00002	0.0004		0.005
SLS 5035/100	mm 35	100	82.5	0.0088	0.00088	0.018	27 deg.	0.12
	in 1.38	3.94	3.25	0.00034	0.000034	0.0007		0.005
SLS 5035/200	mm 35	200	182.5	0.0088	0.00088	0.018	18 deg.	0.25
	in 1.38	7.87	7.19	0.00034	0.000034	0.0007		0.01
SLS 5070/200	mm 70	200	165	0.0175	0.00175	0.035	18 deg.	0.25
	in 2.76	7.87	6.50	0.0007	0.00007	0.0014		0.01
SLS 5100/200	mm 100	200	150	0.025	0.0025	0.050	18 deg.	0.25
	in 3.94	7.87	5.91	0.001	0.0001	0.002		0.01
SLS 5070/300	mm 70	300	265	0.02	0.002	0.035	13 deg.	0.3
	in 2.76	11.81	10.4	0.001	0.0001	0.0014		0.012
SLS 5150/300	mm 150	300	225	0.04	0.004	0.075	13 deg.	0.3
	in 5.91	11.81	8.86	0.001	0.0001	0.003		0.012
SLS 5200/300	mm 200	300	200	0.05	0.005	0.100	13 deg.	0.3
	in 7.87	11.81	7.87	0.002	0.0002	0.0039		0.012
SLS 5325/400	mm 325	400	237.5	0.08	0.008	0.163	10 deg.	0.5
	in 12.8	15.75	9.35	0.0032	0.00032	0.0064		0.02
SLS 5400/450	mm 400	450	250	0.10	0.010	0.200	9 deg.	0.6
	in 15.7	17.72	9.84	0.0039	0.00039	0.0079		0.02
SLS 5750/600	mm 750	600	225	0.19	0.019	0.375	7 deg.	0.8
	in 29.5	23.62	8.86	0.0074	0.00074	0.0148		0.03
SLS 51000/1250	mm 1000	1250	750	0.25	0.025	0.500	3 deg.	1.0
	in 39.4	49.21	29.53	0.0098	0.00098	0.0197		0.04

Note 1: Worst Case Resolution - at full bandwidth

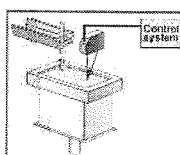
Note 2: Typical Resolution - at 128 sample averaging



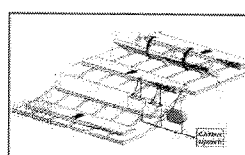
Thickness Profiling



Tire Measurement



Level Control



Wane Detection



Seam Finding

Selcom

Information contained within this document is subject to change. For updated information, please contact LMI.

SLS 5000 Sep 6, 2002

EXHIBIT 10  
PAGE 5 OF 8



## Technical Specifications

**Selcom - SLS 5000****LASER SOURCE**

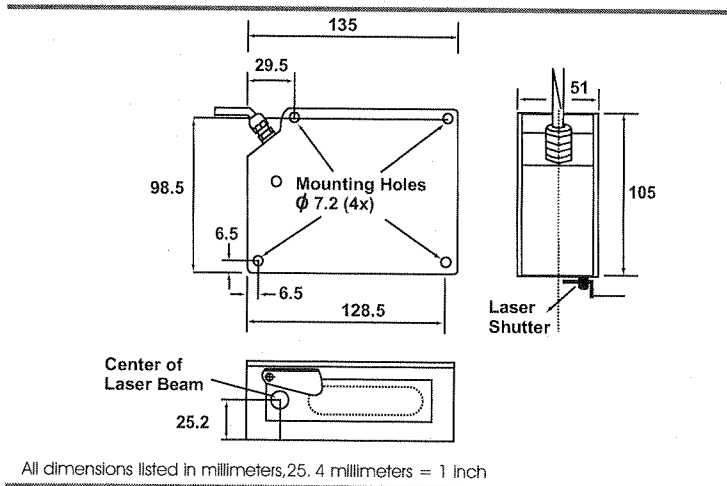
Laser class	2, 3B, 3R (IEC) II, IIIa, IIIb (FDA)	Enclosure	IP-65 / NEMA 4
Wavelength	Visible Red, Near IR	Temperature - Operating	°C 0 - 50 °F 32 - 122
Lifetime expectancy	hr 100 000	Temp. Stability	% of MR / °C 0.01
		Relative Humidity	% <95 non-condensing

**ELECTRICAL**

Power supply voltage	VDC +18 to +32	Dimensions	mm 135 x 105 x 51
Current draw	mA < 350		in 5.31 x 4.13 x 2.01
In rush current	A 1 during 50ms	Weight	kg 1.1
Sampling rate	Hz 16 000		lbs 2.4
Frequency response	Hz 2 000	Cable Length	m 2
Detector type	PSD		ft 6.6

**PHYSICAL****OUTPUT INTERFACES**

Interface, analog / digital	0-20mA	4-20mA	RS232-C	RS-422	Selcom (Digital)
Data update rate	16 kHz	16 kHz	≤100 Hz	≤1 kHz	16 kHz
Max. Cable Length	m 100	100	15	100	100
	ft 328	328	49	328	328

**CONNECTION WIRING**

DSUB 15-pin outputs / IP 65 connector

- 1 Receive Data, RS-232
- 3 Clock, Selcom or RS-422
- 4 Clock-inv, Selcom or RS-422
- 5 Data, Selcom or RS-422
- 6 Data-inv, Selcom or RS-422
- 8 Invalid out-
- 9 Transmit Data, RS-232
- 11 Ground
- 12 Invalid out+
- 13 Analog out (0-20mA, 4-20mA)
- 14 Laser ON (+18 to +32V)
- 15 Power (+18 to +32V)
- 2, 7, 10 NC

**1- YEAR LIMITED WARRANTY**

The company will replace or, at the company's option, repair any system or parts of a system which are found defective in material or workmanship within one year from the date of shipment. Our obligation with respect to such system or parts shall be limited to repair and replacement, F.O.B. our facilities, and in no event shall the company be liable for incidental, consequential or special damages, or for transportation, installation, adjustment or other expenses which may arise in connection with such system or parts. This warranty is expressly made in lieu of any and all other warranties, expressed or implied, including warranties of merchantability and fitness. No waiver, alteration, or modification of the foregoing warranty shall be valid unless made in writing and signed by an executive of the company.

LMI vision sensors are manufactured under one or more of the following U.S. patents: 4,305,661; 4,373,804; 4,375,921; 4,394,683; 4,576,482; 4,667,231; 4,875,776; 5,056,922; 5,114,230; 5,164,579; 5,362,970; 5,510,625; 5,670,787; 5,684,292; 5,691,545; 5,734,172; 5,811,827; 5,854,491; 5,877,491; 5,880,459; 5,940,302; 5,981,965. Other US and foreign patents pending.

[www.lmint.com](http://www.lmint.com)**Head Office:**

LMI Technologies Inc.  
205-7088 Venture St.  
Delta, British Columbia  
Canada, V4G 1H5  
Phone: +1 (604) 940-0141  
Fax: +1 (604) 940-0793  
E-mail: [sales@lmint.com](mailto:sales@lmint.com)

**North America:**

LMI Selcom Inc.  
21666 Melrose Ave.  
Southfield, MI 48075  
USA  
Phone: +1 (248) 359-2409  
Fax: +1 (248) 355-3283  
E-mail: [sales@lmint.com](mailto:sales@lmint.com)  
USA East: +1 (770) 888-6586

**Europe & rest of the world:**

LMI Selcom AB  
Box 250  
S-433 25 Partille  
Sweden  
Phone: +46 31 336 25 00  
Fax: +46 31 44 61 79  
E-mail: [sales.lmiselcom.ab@lmint.com](mailto:sales.lmiselcom.ab@lmint.com)

**Europe:**

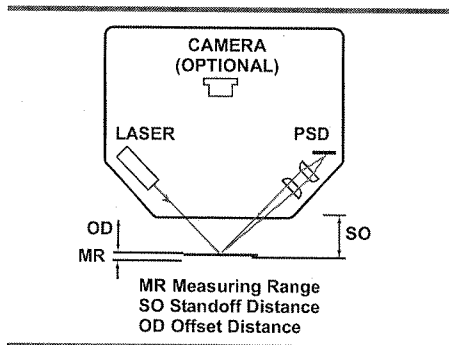
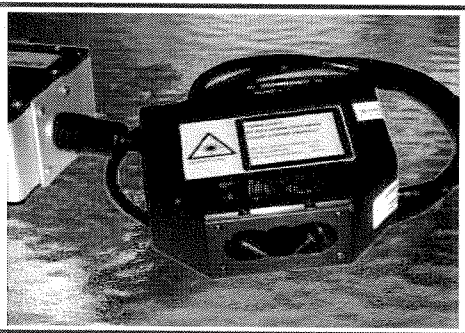
LMI Sensors-95  
Valkenburgerweg 223  
6419 AT Heerlen  
The Netherlands  
Phone: +31 45 850 7000  
Fax: +31 45 574 2500  
E-mail: [sensors95@lmint.com](mailto:sensors95@lmint.com)



## Product Information



## Selcom - SLS 7000



## Designed for Reflective Surfaces

## Unprecedented Sub-Micron Resolution

- Specially Designed for Mirror to Semi-Specular Surfaces
- 10 Micron Laser Spot for Small Features
- Optical & Electronic Design Suppresses Speckle Noise
- Optional Video Camera Simplifies Spot Alignment & Feature Measurement Setup
- High Speed PSD-Based Triangulation Sensor
- Fast Automatic Light Control for Varying Surfaces
- Analog and Digital Outputs
- Rugged Industrial Packaging
- Includes SLS PPU Interface Box

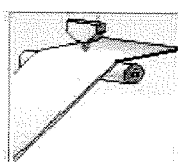
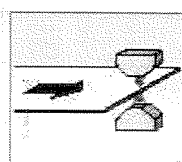
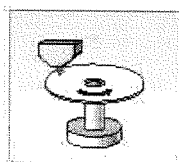
## Technical Specification

Model Number	Measurement Range (MR)		Stand Off (SO)	Offset Distance (OD)	Resolution (Worst Case)	Resolution (Typical)	Linearity	Triangulation Angle at SO	Spot Size at SO
					Note 1	Note 2	Note 3		
SLS 7001/15	mm	1	15	14.5	0.00025	0.000025	0.0005	86 deg.	0.010-0.020
	in	0.04	0.59	0.57	0.00001	0.000001	0.00002		0.0004-0.0008

Note 1: Worst Case Resolution - at full bandwidth

Note 2: Typical Resolution - at 128 sample averaging

Note 3: Linearity Specified Using a Mirror Target



## Options &amp; Accessories

- Integrated Video Camera for Precise Spot Location
- User Selectable Averaging from 1-1024 Values for Resolution Improvement
- +24 VDC Power Supply Unit

Selcom 

SLS 7000 Dec 3, 2002

Information contained within this document is subject to change. For updated information, please contact LMI.

## Technical Specifications

**Selcom - SLS 7000****LASER SOURCE**

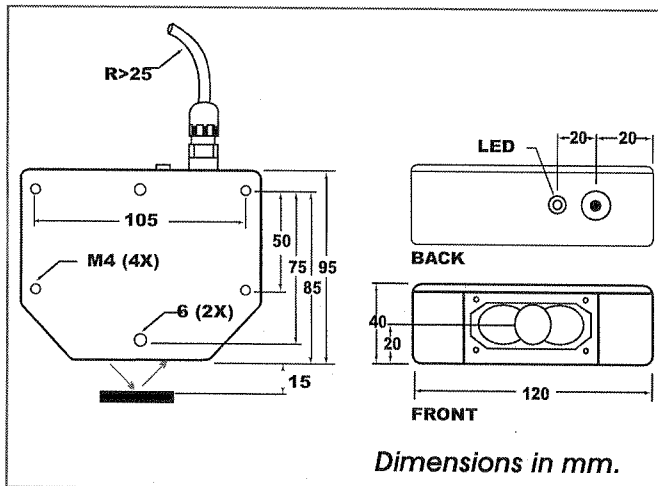
Laser class	2 (IEC)	Enclosure	N/A	
	II (FDA)	Temperature	°C	0 - 50
			°F	32 - 122
Wavelength	Visible Red	Temp. Fluctuation	% of MR / °C	0.01
Lifetime expectancy	hr 100 000	Relative Humidity	%	<95 non-condensing

**ELECTRICAL**

Power supply	VDC +18 to +32	Dimensions	mm	120 x 95 x 40
Current draw	mA < 350		in	4.72 x 3.74 x 1.57
In rush current	A 1 during 50ms	Weight	kg	0.75
Sampling rate	Hz 16 000		lbs	1.65
Frequency response	Hz 2 000	Cable Length	m	2
Detector type	PSD		ft	6.6

**PHYSICAL (SESOR HEAD)****OUTPUT INTERFACES**

Interface, analog / digital	0-20mA	4-20mA	RS232-C	RS-422	Selcom (Digital)
Data update rate	16 kHz	16 kHz	≤100 Hz	≤1 kHz	16 kHz
Max. Cable Length	m 100	100	15	100	100
	ft 328	328	49	328	328

**CONNECTION WIRING (from interface box)**

DSUB 15-pin outputs / IP 65 connector

- 1 Receive Data, RS-232
- 3 Clock, Selcom or RS-422
- 4 Clock-inv, Selcom or RS-422
- 5 Data, Selcom or RS-422
- 6 Data-inv, Selcom or RS-422
- 8 Invalid out-
- 9 Transmit Data, RS-232
- 11 Ground
- 12 Invalid out+
- 13 Analog out (0-20mA, 4-20mA)
- 14 Laser ON (+18 to +32V)
- 15 Power (+18 to +32V)
- 2, 7, 10 NC

**1- YEAR LIMITED WARRANTY**

The company will replace or, at the company's option, repair any system or parts of a system which are found defective in material or workmanship within one year from the date of shipment. Our obligation with respect to such system or parts shall be limited to repair and replacement, F.O.B. our facilities, and in no event shall the company be liable for incidental, consequential or special damages, or for transportation, installation, adjustment or other expenses which may arise in connection with such system or parts. This warranty is expressly made in lieu of any and all other warranties, expressed or implied, including warranties of merchantability and fitness. No waiver, alteration, or modification of the foregoing warranty shall be valid unless made in writing and signed by an executive of the company.

LMI vision sensors are manufactured under one or more of the following U.S. patents: 4,305,661; 4,373,804; 4,375,921; 4,394,683; 4,576,482; 4,667,231; 4,875,776; 5,056,922; 5,114,230; 5,164,579; 5,362,970; 5,510,625; 5,670,787; 5,684,292; 5,691,545; 5,734,172; 5,811,827; 5,854,491; 5,877,491; 5,880,459; 5,940,302; 5,981,965. Other US and foreign patents pending.

[www.lmint.com](http://www.lmint.com)
**Head Office:**

LMI Technologies Inc.  
205-7088 Venture St.  
Delta, British Columbia  
Canada, V4G 1H5  
Phone: +1 (604) 940-0141  
Fax: +1 (604) 940-0793  
E-mail: sales@lmint.com

**North America:**

LMI Selcom Inc.  
21666 Melrose Ave.  
Southfield, MI 48075  
USA  
Phone: +1 (248) 359-2409  
Fax: +1 (248) 355-3283  
E-mail: sales@lmint.com  
USA East: +1 (770) 888-6586

**Europe & rest of the world:**

LMI Selcom AB  
Box 250  
S-433 25 Partille  
Sweden  
Phone: +46 31 336 25 00  
Fax: +46 31 44 61 79  
E-mail: sales.lmiselcom.ab@lmint.com

**Europe:**

LMI Sensors-95  
Valkenburgerweg 223  
6419 AT Heerlen  
The Netherlands  
Phone: +31 45 850 7000  
Fax: +31 45 574 2500  
E-mail: sensors95@lmint.com



EXHIBIT 10  
PAGE 8 OF 8